CONTENTS

No. 1

M. OTAGIRI, T. IMAI, N. MATSUO and K. UEKAMA: Improvements to some pharmaceutical properties of flurbiprofen by β- and γ-cyclodextrin complexations 1

M. OTAGIRI, T. IMAI, F. HIRAYAMA, K. UEKAMA and M. YAMASAKI: Inclusion complex formations of the antiinflammatory drug flurbiprofen with cyclodextrins in aqueous solution and in solid state 11

Symposium on Topical Administration of Drugs, Stockholm, January 19–21, 1983 21

L. FRANKENBERG: Studies on cyanide detoxication 72

E. EHRIN, S. STONE-ELANDER and J. L. G. NILSSON: Photosynthetic preparation of ^{11}C-labelled glucose. Cultivation of the green algae used in the procedure 73

R. C. ROWE: The coating of tablet surfaces by lubricants as determined by a film/tablet adhesion measurement 77

No. 2

B. BERGSTRAND: Aminolysis and hydrolysis of formanilide in water solutions. Influence of pH and of the structure of the catalyzing imidazole derivative 81

A. K. KOLSTAD: Studies on the distribution of aromatic 2-sulfonic acids to 1-pentanol 99

E. THUNBERG, G. SAMUELSSON and M. M. TEETER: Modification of arginine residues in phoratoxin B by 1,2-cyclohexanedione. (*Erratum*, p. 400) ... 107

E. THUNBERG: Phoratoxin B, a toxic protein from the mistletoe *Phoradendron tomentosum* subsp. *macrophyllum* (*Erratum*, p. 400) 115

I. HJÄRTÉN, P.-E. WERNER, A. WÄGNER and L. FLORVALL: Crystal structure and absolute configuration of the dihydrobromide of a selective monoamine oxidase inhibitor: (S)-(+)-4-dimethylamino-2,α-dimethylphenethylamine 123

L. MOLIN, G. DAHLSTRÖM, M.I. NILSSON, L. NYBERG and L. TEKENBERGS: Solubility, partition, and adsorption of digitalis glycosides 129

J.-O. WALTERSSON and P. LUNDGREN: Nonisothermal kinetics applied to drugs in pharmaceutical suspensions 145

L. BORKA: The polymorphism of propantheline bromide 155
L. BORKA: Letter to the Editor 158
G. SWEDBERG: Characterization of plasmid-borne sulfonamide resistance in Escherichia coli 159
M. M. HALLDIN: Studies on the biotransformation of tetrahydrocannabinol in man and animals 160

Nr. 3

H. EMILSSON, A. LEWISSON and H. SELANDER: Synthesis and antihypertensive activity of some derivatives of diaminoguanidine and 3-hydrazino-4*H*-1,2,4-triazoles 161
G. HALLSTRÖM, C. H. NGUYEN and A. K. CHO: Phencyclidine N-oxide. Synthesis, decomposition and *in vitro* metabolism studies 181
K. LÖVGREN, A. HEDBERG and J. L. G. NILSSON: Potential adrenoceptor-active compounds. Selectivity in β-adrenergic agents related to metoprolol .. 193
A. K. KOLSTAD: Distribution of organic ammonium ions to 1-pentanol as ion pairs with dihydrogen phosphate. Part I. Effect of buffer composition on distribution ratios 203
A. K. KOLSTAD: Distribution of organic ammonium ions to 1-pentanol as ion pairs with dihydrogen phosphate. Part II. Effect of addition of tetra-n-hexylammonium ion 213
J. HAAVALDSEN, V. NORDAL and M. KELLY: X-Ray contrast agents. Part I. Synthesis of some derivatives of 5-amino-2,4,6-triiodoisophthalamide 219
C. SAHLBERG, K. LUTHMAN and A. CLAESSON: Synthesis of radioactively labelled allenic MAO-inhibitors 233
B. TENNHAMMAR EKMAN: Studies on dihydrofolate reductase and trimethoprim resistance in Escherichia coli 239
E. THUNBERG: Mistletoe toxins. Isolation and structural studies 240

No. 4

H. W. STUURMAN and E. ARVIDSSON: Extraction of some organic acids and water to *n*-decane by complex formation with the strong proton acceptor tri-*n*-octylphosphine oxide 241
L. FLORVALL, A.-L. ASK, S. B. ROSS, S.-O. ÖGREN and A.-C. HOLM: Selective monoamine oxidase inhibitors. Part II. 4-Aminophenylalkylamine derivatives 255

E. J. LIEN and J. L. G. NILSSON: QSAR of *N*-alkylated 2-aminotetralins as central dopamine receptor stimulating agents 271

A. LI WAN PO, A. N. ELIAS and W. J. IRWIN: Non-isothermal and non-isopH kinetics in formulation studies 277

K. UEKAMA, T. FUJINAGA, M. OTAGIRI, N. MATSUO and Y. MATSUOKA: Improvement of dissolution and chemical stability of proscillaridin by cyclodextrin complexations 287

T. MALMFORS: Toxicological studies on zimeldine 295

C. BOGENTOFT, C. ESKILSSON, U. E. JONSSON, P. O. LAGERSTRÖM, K. LÖVGREN and L. ROSÉN: Delivery of drugs to the colon by means of a new microencapsulated oral dosage form 311

D. H. CALAM and D. W. MATHIESON: The practical use of infrared reference spectra for identification purposes in pharmacopoeial monographs 315

I. NORDGREN: Bioanalytical studies on some cholinergic substances using stable isotopes and gas chromatography — mass spectrometry 317

C. SAHLBERG: Chemical and biological studies of α-allenic amines. Syntheses, reactions and inhibitory effects on monoamine oxidase 319

A. K. KOLSTAD: Equilibrium and kinetic studies on the extraction of acids and ion pair 320

No. 5

M. NICKLASSON and H. NYQVIST: Studies on relationship between intrinsic dissolution rates and rates of water adsorption 321

J. D. DUNCAN, G. HALLSTRÖM, V. M. FLORENCE, A. K. CHO and B. LINDEKE: *N*- and α*C*-oxidation of α-alkyl substituted phenethylamines by a reconstituted cytochrome P-450 oxidase system from rabbit liver 331

H. EMILSSON and H. SELANDER: Synthesis and antihypertensive activity of some hydrazones of 3-hydrazino-4*H*-1,2,4-triazole 341

Y. KUMAR, L. FLORVALL, A.-L. ASK, S. B. ROSS, A.-C. HOLM and S.-O. ÖGREN: Selective monoamine oxidase inhibitors. Compounds derived from phenethylamine and 1-phenoxy-2-aminopropane 349

L. FLORVALL, M.-L. PERSSON and S.-O. ÖGREN: Potential neuroleptic agents. II. Synthesis and dopamine blocking activity of some new 2,6-dimethoxybenzamide derivatives 365

M. NABIL ABOUL-ENEIN, M. R. MAHRAN, N. A. ABDALLAH, A. I. EID and S. A. KENAWY: Synthesis and analgesic activity of basic esters of 1-benzanilidocyclohexanecarboxylic acids 371

Y. KANEO: Absorption from the nasal mucous membrane. I. Nasal absorption of hydralazine in rats 379

T. KRONEVI and S. LJUNGBERG: Sequelae following intra-arterially injected diazepam formulations 389

L. HACKSELL: Detection in liquid chromatography by means of UV-absorbing of fluorescent system components 397

H. WIKSTRÖM: Centrally acting dopamine receptor stimulants with special reference to dopamine autoreceptors and stereoselectivity 398

H. EMILSSON: Substituted 4*H*-1,2,4-triazoles with antihypertensive properties. Synthesis and structure-activity relationships 399

No. 6

L. ANDERSSON, G. LIDGREN, L. BOHLIN, L. MAGNI, S. ÖGREN and L. AFZELIUS: Studies of Swedish marine organisms. Part I. Screening of biological activity 401

T. SJÖBLOM, L. BOHLIN and C. CHRISTOPHERSEN: Studies of Swedish marine organisms. Part II. Muscle-relaxant alkaloids from the marine bryozoan *Flustra foliacea* 415

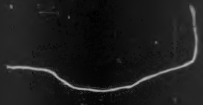
H. EMILSSON and H. SELANDER: Synthesis and antihypertensive activity of some 3-substituted 4*H*-1,2,4-triazoles 419

B. MØLLGAARD and A. HOELGAARD: Vehicle effect on topical drug delivery. Part I. Influence of glycols and drug concentration on skin transport 433

B. MØLLGAARD and A. HOELGAARD: Vehicle effect on topical drug delivery. Part II. Concurrent skin transport of drugs and vehicle components 443

E. LAINE, V. TUOMINEN, P. KAHELA, L. LIPONKOSKI and R. SJÖHOLM: Physical studies of detomidine hydrochloride, a new drug substance 451

M. N. ABOUL-ENEIN and A. A. EL-AZZOUNY: Synthesis of 1-(*N*-phenyl-*N*-arylmethyl)-cyclohexylmethylamines of potential analgesic and antihistaminic activities 461

U. PAULSEN-SÖRMAN and B. LINDEKE: Cytochrome P-455 nm complex formation in the metabolism of phenylalkylamines. Part X. Comparative studies with 2-amino- and 2-hydroxyamino-1-phenyl-1-alkanols 467

A.-L. ASK: Studies on amiflamine, a reversible inhibitor of monoamine oxidase type A, selective for serotonergic neurons 473